

### **REMARKS**

Applicants have received and reviewed the Office Action dated July 8, 2009. By way of response, Applicants have amended claims 1, 8, 90, and 91. No new matter has been added. Claims 1-4, 8, 9, 67-76, 79-85, and 88-91 are pending. Applicants submit that the amended claims are supported by the specification as filed.

For the reasons presented below, Applicants respectfully submit that the amended claims are in condition for allowance, and notification to that effect is earnestly solicited.

#### **Certain Recitations in the Independent Claims**

Independent claims 1 and 8 recite:

“2 or more of the different building block molecules being in proximity to one another”; and  
“2 or more of the different building block molecules ... together forming” an artificial receptor.

The term “proximity” is described in the specification as filed at least at page 50, lines 23-28:

In an embodiment, the method produces a surface or coating with a density of building blocks sufficient to provide interactions of more than one building block with a ligand. That is, the building blocks can be in proximity to one another. Proximity of different building blocks can be detected by determining different (e.g., greater) binding of a test ligand to a surface including a plurality of building blocks compared to a surface or surfaces including only one of the building blocks.

Building block molecules being in proximity to one another and together forming an artificial receptor provide one of the advantages of the presently claimed invention.

Independent claims 1 and 8 recite: “at least one of the block molecules is naïve with respect to the test ligand”. The term “naïve” is defined in the specification as filed at least at the paragraph bridging pages 9 and 10:

As used herein, the term “naïve” used with respect to one or more building blocks refers to a building block that has not previously been determined or known to bind to a test ligand of interest. For example, the recognition element(s) on a naïve building block has not previously been determined or known to bind to a test ligand of interest. A building block that is or includes a known ligand (e.g., GM1) for a particular protein (test ligand) of interest (e.g., cholera toxin) is not naïve with respect to that protein (test ligand).

Employing one or more naïve building block molecules is another advantage of the presently claimed invention.

### **Claim Objections**

The Examiner objected to claim 91 as being a duplicate claim of claim 90. Claim 91 now depends from claim 8. Thus, it does not duplicate claim 90. Accordingly, withdrawal of this objection is earnestly solicited.

### **Rejection of Claims Under 35 U.S.C. § 112, Second Paragraph**

The Examiner rejected claims 1-4, 8-9, 67-76, 79-85 and 88-91 under 35 U.S.C. § 112, second paragraph. The Examiner objected to the wording of the text about lawn moieties in claims 1 and 8. Applicant respectfully traverses this rejection.

Claims 1 and 8 have been amended to recite that if a region “comprises building block molecules immobilized by van der Waals interactions”, then the region is also “functionalized with a lawn reagent; the lawn reagent being covalently coupled to the support in the region and comprising a moiety that engages in van der Waals interactions with building block molecules”. Support for the recitation of lawn reagent can be found in the specification as filed at least at the paragraph bridging pages 13 and 14.

This amendment does not narrow claims 1 and 8. It was made solely to expedite prosecution of the present application and not to acquiesce to the rejection.

Accordingly, Applicants respectfully submit that the amended claims fully comply with § 112, second paragraph, and withdrawal of this rejection is earnestly solicited.

**Summary**

In view of the above amendments and remarks, Applicant respectfully requests a Notice of Allowance. If the Examiner believes a telephone conference would advance the prosecution of this application, the Examiner is invited to telephone the undersigned at the below-listed telephone number.

Please consider this a PETITION FOR EXTENSION OF TIME for a sufficient number of months to enter these papers or any future reply, if appropriate.

Please charge any additional fees or credit any overpayment to Deposit Account No. 13-2725.

Respectfully submitted,

MERCHANT & GOULD P.C.  
P.O. Box 2903  
Minneapolis, Minnesota 55402-0903  
(612) 332-5300

Date: 8 Jan '10

Mark T. Skoog  
Mark T. Skoog  
Reg. No. 40,178

MTS:kf

**23552**

PATENT TRADEMARK OFFICE